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ESTABLISHED 1848



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Established 1848

ST. LOUIS, MO. WEDNESDAY, MARCH 5, 1902.

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COLMAN'S RURAL WORLD.

Published every Wednesday, in Chemical building, corner of Eighth and Olive streets, St. Louis, Mo., at one dollar per year. Eastern office, Chalmers D. Colman, 120 Temple Court, New York City. Advertisers will find the RURAL WORLD the best advertising medium of its class in the United States. Address all letters to COLMAN'S RURAL WORLD, Chemical Building, St. Louis, Mo.

Subscribers must bear in mind that the subscription price of the RURAL WORLD is one dollar a year, and that we do not receive single subscriptions for a less sum, but in our constant effort to enlarge our circulation, we do allow old subscribers to take actually NEW subscribers at the fifty-cent rate, adding a new name with their own for one dollar, and other new names at fifty cents each, but in no case do we accept two OLD subscribers for one dollar. We are willing to make a loss on a new subscriber the first year, believing he will find the RURAL WORLD indispensable ever after. We also send the RURAL WORLD in conjunction with either the twice-a-week "St. Louis Republic" or the twice-a-week "Globe-Democrat" for one dollar and fifty cents a year, and new subscribers may be added at the fifty-cent rate. Published at this remarkably low price—less than actual cost—all subscribers must see the necessity of our dropping from our subscription list every name as soon as the year paid for expires. Thus if, on the printed slip on each paper you see John Jones Feb. '02, it indicates that the name will drop from the list at the end of February, and if he wishes to continue to receive it, he must renew his subscription. If he would do it a week or two in advance, it would save us the trouble of taking his name off the list and again putting it in type, when he renewed, which frequently causes mistakes. This is the season to push the good work of getting new subscribers. Show your neighbors a copy of the RURAL WORLD, call their attention to the large amount of fresh, original, entertaining and instructive reading matter contained in each issue; tell them of our large number of intelligent correspondents, and how highly you appreciate its weekly visits and of the low cost at which it can be received. If our readers will spend but a portion of one or two days in enlisting in this work they can easily add more than fifty thousand names within the next 60 days. Who will engage in this work? Will not each reader, male and female, young and old, go into the field at once and see how much he can do to help not only the farmer, but the cause of progressive agriculture?

Some one has well said that there are three things that every good farmer will endeavor to secure, viz., proper plant food for his crops, proper ration for his stock, and proper reading for himself and family. Thousands of farmers are in this year 1902, for the first time, supplying themselves with the proper reading by subscribing for the RURAL WORLD. They believe that brains should be cultivated as well as the soil. One might as well drop the culture of one as the other.

Honorable C. C. Bell, Commissioner in charge of the Fruit Exhibit at the Pan-American Exposition, writing from Charleston, S. C., asks us to list to RURAL WORLD readers that diplomas for the Missouri exhibitors in the fresh fruit department are now being prepared, and will soon be ready for delivery. When completed they will be forwarded to the Missouri Commission at Charleston.

We are not informed regarding the dairy and other agricultural diplomas, but presume they will all be forthcoming shortly—probably within the next three weeks.

R. J. Gatling, of Gatling gun fame, has turned his inventive genius from the field of war into more peaceful paths and has invented a plow operated by a gasoline motor, and which is to be shown at the World's Fair. It is said that the plow, which is a gang of discs, can be operated at a cost of \$3 per day, and that it will do the work of thirty to forty men and sixty to eighty horses. All of which may be true, but—Mr. Gatling is probably a better inventor than he is a farmer. Judging by another claim made for his plow, he says a wheat drill may be attached to the machine and the plowing and sowing all be done at the one operation. Experienced wheat raisers in Missouri at least—will have to be shown the practicability of sowing wheat in a seed bed thus prepared before they will accept that claim for the Gatling plow.

the chair, and accorded a delegation of St. Louisans a cordial welcome and hearty address. Addressed by C. H. Spencer, First Vice-President of the World's Fair Association; ex-Congressman Nathan Frank, a member of the Association's executive committee, and Norman J. Colman, Secretary of Agriculture under President Cleveland. The St. Louis delegation also included Geo. T. Tansey, President of the St. Louis Merchants' Exchange; ex-Congressman F. C. Niedringhaus, and Messrs. Charles S. Brown, C. L. Hilleary, George W. Parker and George M. Wright. The delegation took luncheon at the home of Mrs. Washington A. Roebing, a member of the Board of Lady Managers.

A PROGRESSIVE SPIRIT.
A contributor from Pettis County, Mo., manifests a progressive spirit in sending an order for copies of the RURAL WORLD to be sent to men on his farm. "There are two men who are on separate farms working for me and I hope to benefit both them and their employer by furnishing good society for them and their families. This is not the only agricultural guide I am subscribing for for them. They will obtain lessons from the papers which, if put into practice, will help them into homes and onto farms of their own."

PLANT EARLY FORAGE CROPS.
The present scarcity of stock feed in many sections where last season's drought prevailed will be a strong incentive to our readers to be prepared at the earliest possible moment to get seed for quick maturing forage crops in the ground. A few small patches of ground so situated that they can be grazed and sown to oats, corn, rape, Kaffir corn, etc., as soon as it is possible to get the seed in the ground, will be found very helpful. If oats and rape seed or corn and rape seed be sown together the oats or corn will afford the first grazing and the rape will provide, as it were, a second crop of forage without further preparation. Early varieties of sweet corn will be found very useful for forage purposes, either to be grazed or later in the season cut and fed green.

A FARM HOME PRODUCT.
Our readers and all who are interested in the advancement of agriculture will have more than a passing interest in the announcement of the death of Col. Francis Wayland Parker, which occurred at Pass Christian, Miss., March 2. Every active school teacher is familiar with this peer among teachers in our land. His books on pedagogy are in the libraries of the best teachers. He was their inspiration and the child's best friend. But it is to his experience as a farm-raised boy and his interest in later years in the intellectual welfare of country boys and girls which we wish especially to refer.

Col. Parker was born at Bedford, N. H., in 1834, and worked for five years on a farm. He began his education at Mount Vernon Academy, working for his tuition. Afterward he attended Hopkinton Academy and became a teacher. In 1855 he was made superintendent of schools in Quincy, Mass., which school became a model for the rural methods therein used. The child here was studied and naturally unfolded. After several years he went to Chicago and became principal of the Cook County Normal School, a position he held till he resigned to become the head of the Chicago Institute, founded by Mrs. Emmerson Blake. But in all of his educational work, Col. Parker did not forget his boy life on the farm or the mental obligation he was under to it for knowledge then gained; so he was always deeply interested in rural school problems, and especially the advantage that the child of the right kind offers to the child. "Nowhere on earth," says this great teacher, "has a child such advantages for elementary education as upon a good farm, where he is trained to love work and to put his brains to work." He says of himself, referring to the period when he was a "country boy": "I began the study of geography, real geography, by observing with ever-increasing interest the hills, valleys, springs, swamps and brooks upon the farm. The topography of the land was clear and distinct." It was thus that he studied not only geography, but the foundations of geology, geology and mineralogy. He learned in an elementary way the nature of the soils; why one field was better than another for a certain crop, and he began to reason upon cause—sunshine, drainage, drought and fertilization. He studied botany. All the kinds of grasses he knew—timothy, clover, red-top, silver grass, pigeon grass—how they

were sown, how they came up, grew, were cut, cured and fed. He knew the different weeds, the weeds, the weeds, the weeds—and had a practical knowledge of them from close contact with the hoe and his bare hands. How many farmer lads realize that they may study botany while hoeing? All such knowledge as the farm lad gets in the field, the botanist must glean from lifeless books.

Thinking of Col. Parker's experience as a "country boy," and of his career as an educator, we could not but wish that more of the homeless city children could have the privileges of farm homes. Then we were reminded that the Children's Home Society of Missouri is doing a noble work in this direction, one of which our readers would be pleased to know.

The purpose of this institution is to locate destitute, neglected and ill-treated children, receive them into legal guardianship, place them in the homes of approved families, and keep them under observation until maturity. Destitute children throughout the State, physically and mentally sound, and not incorrigible, and under twelve years of age, are received by the society. Nearly 1,500 children have been provided for since its organization in 1891. The society is always pleased when opportunity is afforded for placing these orphans, or sometimes worse than orphans, in good farm homes. Rev. C. C. Stahmann, State Superintendent, 330 Olive St., St. Louis, Mo., will gladly give information to anyone desiring to care for one of these homeless children. Such a child may live to bring honor to those fostering it and be a blessing to humanity as was the greatly loved Col. Parker.

REVIEWING OUR PICTURE GALLERY.
Editor RURAL WORLD: With each succeeding issue your paper seems to become more interesting and valuable. The portraits that have appeared in recent issues are to me of much interest, not only that I like to look at them, but that they furnish matter for interesting and profitable study.

Among the many that have appeared permit me to refer to only a few. First in my esteem and affection stands the late Judge Samuel Miller. The clearly drawn lines show how assiduously he applied himself to his chosen work, and that, largely in the interest of others, and often "while others slept" and while his life was one of almost incessant toil, he would hardly suppose that it was altogether free from care.

The Honorable Mr. Mills—One seldom meets a man of his age so well preserved physically. On the battlefield he might have gained renown, though that would hardly be in his line. As a presiding officer he would have few equals—no superior. His very presence commands respect which in his turn gives way to something akin to reverence.

In Mr. F. W. Taylor, Commissioner of Agriculture for the World's Fair, there is strength of purpose, large will-power and executive ability. All combine to make him a good and useful leader of men. A man fit for the presidential chair.

COST OF A RURAL TELEPHONE LINE.

Editor RURAL WORLD: In reply to request in issue of January 23 for information as to construction of rural telephone lines, I will say that the cost of lines will vary. A line that is to be eight miles long with 16 poles, each member would build one-half mile. Those living on cross roads must come to the main line at their own expense. Our line, known as the "Eagle," was built last fall. It is eight miles long with 14 members. We have 24 poles to the mile. They cost us about 40 cents each. They are 16 feet long, and not less than four inches at the small end. Where a road is crossed 20-foot poles should be used.

Our poles are white oak, set in the ground three feet. There was no charge for the work, as each man furnished so many poles and set them. We worked in four gangs and set the poles in two days and a half; put the wires up in two days at a cost of 17 each.

Now, this part was all right, and much cheaper than we expected; but to wind up we made a great blunder in getting poles. We did not take the foreman's advice in the Western Union Telephone office and get the very best poles. We saw in a big Chicago catalog that we could get poles just as good and much cheaper. Well, we tried them. We got a little fun out of them and lots of aggravation, and then returned them. We have some now that are O. K.

I want to tell the readers of RURAL WORLD how we worked up this. We talked telephone about two years and did nothing. It was everybody's business and nobody's. Finally one man said to some of the others, "Let us call a telephone meeting and see what we can do." At this meeting there were ten farmers that subscribed for the line. They appointed a committee to see about the poles, another to see about the wire and the brackets, and report at next meeting. From then on it was all easy.

Some will ask, "What use is this to farmers?" Well, in my opinion it is indispensable. It calls the doctor and consults with some whenever necessary, outstrips the messenger boy, makes appointments, conveys invitations to friends, and communicates between the home and the school. It saves those enough to pay the central dues. It calls the police when one catches a chicken thief. It sells one's produce on the farm, gives alarm in case of fire and helps about hunting stock that has gotten away. It may stop a runaway team sometimes. A telephone pole carried a total deposit of \$1,000,000, with 8,000 depositors; in 1900 over six million depositors have to their credit nearly two and a half billion dollars.

HORSE AND HARNESS.—Notwithstanding the advent of the horseless vehicles the faithful horse is still retained by those who delight in drives in and around the capitol. A paragraph in a local paper thus describes how the Washington fashionables have trapped for all kinds of weather:

"Three hundred dollars is a small price for a harness. This is the lowest figure paid by such persons who maintain carriages in this city. There are very few establishments which do not have at least three sets of harness. The first harness, or what is considered the best, is for fair weather. The second harness is for inclement weather. The third is used only on days when the rain or snow is falling. It is said that the harness men alone for fashionable establishments of Washington amount to over \$1,000. There are a great many stables that have but one harness. This must be used upon every and all occasions. The real 'wells,' however, are not content with less than three sets of harness."

THE BIG FAIR.—Citizens of the Old Dominion State are enthusiastically endeavoring to further the interests of that state by being adequately represented in the exhibit department of the coming big fair in St. Louis. With this object in view, several counties are sending parties to Richmond to secure such legislation as may be necessary to present a creditable exhibit at the Exposition.

LET THEM IN.—The House Committee on Territories has placed itself on record as being unanimously in favor of the admission of the territories of New Mexico, Arizona and Oklahoma as full-fledged states. A motion by Representative Moon, of Tennessee, that it was the sense of the committee that the above-named territories were entitled to statehood resulted in a favorable opinion, and sub-committees were appointed to prepare bills accordingly. The various advocates of statehood are happy at the progress made, and hope favorable action will be taken by both branches of Congress. These territories will, we are confident, if given statehood, measure up to the standard of requirements in every particular and add a positive element of strength and dignity to our national life.

of everything about him necessary to the comfort of his family. He said that he had less than \$100 to begin on, but space forbids and I close. C. D. LYON, Ohio.

PEBBLES FROM THE POTOMAC.

Editor RURAL WORLD: Perhaps few are aware that the large supplies of vegetables that Washington gets from Virginia are principally raised on what was once the Great Diamond Swamp. Some 35 years ago an endeavor was made to drain this vast tract of waste land, and the effort resulted in reclaiming many acres of the richest soil in the Old Dominion State. This land is eagerly sought by the produce growers and commands a higher price per acre than the best lands in Virginia and North Carolina have ever realized. Since the original movement to reclaim this vast morass many more acres have been put under cultivation, and the results have proved highly satisfactory. This section now not only supplies its local demands, but supplies the great cities on the Atlantic seaboard and Baltimore, Philadelphia and Washington with a large portion of their vegetables. Precautionary measures adequately protect the land from overfishing, and many more acres will undoubtedly be reclaimed and utilized.

MARCH OF PROGRESS.—Students of statistics will undoubtedly find food for thought in the following observations gleaned from the Statistical Abstract that has just been issued by the Treasury Department, which draws some significant comparisons between the state of our nation to-day and the prevailing conditions a century ago. We will for convenience reduce the observations to paragraphs:

The area of the states proper have increased from 323,000 square miles in 1800 to 3,026,000 in 1900. Population in same period, 6,900,000 to 75,700,000.

In 1800 Virginia ranked first in population. In 1900 its rank is the seventeenth. Pennsylvania then was second in population and is second now. New York in 1800 ranked third and now ranks first. Delaware from seventeenth in 1800 to forty-sixth in 1900. Among other states we find that since the year 1800 Indiana moved from the twenty-first to the eighth; Ohio from eighteenth to fourth. The two latter states were territories in 1800.

In 1805 the public debt per capita was \$78.25; in 1900, \$13.45, decreasing the interest per capita from \$4.29 to \$3.25.

Eighty years ago the savings banks carried a total deposit of \$1,000,000, with 8,000 depositors; in 1900 over six million depositors have to their credit nearly two and a half billion dollars.

SOUTHEAST KANSAS NOTE.
Editor RURAL WORLD: We had real winter weather in February. The snow afforded the wheat and stock protection. All kinds of stock are doing well and feed is getting a little cheaper. The old saying is, "An early bluster an early spring." If it proves true this season it will be all right.

I have been trimming hedge and laying it down. I trim both sides and then mence at one end, cutting it nearly off and lay it down. When the young growth comes on, the fence will be about four feet high and hog tight. I know some will say a hedge is a nuisance. A woven wire fence would be better, but it would cost me \$600 to replace my hedge with such a stock proof fence. Having a tight fence, I turned onto my stubble field, and the stock had plenty. When it rained the last of July, the prairie grass started up, and when the second drought had cut the stubble-field pasture short the prairie was good pasture; so I had good pasture all summer and until late in the fall. My prairie will make a fine pasture next summer and it would be poor if it had not been rested during the drought.

O' well, Mr. C. A. Bird, I have got the start of you, for I have the pictures of Judge Samuel Miller and Mr. Edwin H. Richi and a colored picture of an apple tree loaded with fruit with one large apple and a half apple lying at the base of the tree. It is the Missing Link variety that Mr. Miller sent me last spring with some grafts. I have them in a frame with a glass over them. The red and yellow apples and the green tree make a pretty picture. H. BELLAIRS, Montgomery Co., Kan.

COLMAN'S RURAL WORLD. Established in 1848, is one of the truly prominent institutions of St. Louis, and has done more to introduce progressive methods among Missouri farmers than all other influences combined. At \$1 per year it is one of the most valuable weeklies that comes to our office and the publishers give old subscribers the privilege of sending a new name with their own at \$1 for the two and additional names at 50 cents each. This is an opportunity that no farmer should miss.—Linn Creek (Mo.) Revell.

SOME VIEWS ON LIFE INSURANCE.

Editor RURAL WORLD: One of the first articles I read in your very readable paper is "Notes from an Ohio Farm," by C. D. Lyon.

In the issue for Jan. 23, Mr. L. leaves the beaten track of farm topics on which he is usually so well qualified to speak and touches on insurance—both fire and life. On the latter topic he seems not clearly to apprehend the conditions that are plainly indicated in the laws of nature. I may insure a thousand farm buildings and keep them insured for 50 years. Very few of them, probably, will ever burn. But I must charge a rate sufficient to meet the losses when they come. I may insure a thousand farmers and in 50 years nearly all will be dead, and I must charge a rate sufficient to pay all the losses either within the 50 years or in the few succeeding years.

Ultimately there is no such thing as "cheap life insurance." A thousand dollars of life insurance must either cost \$1,000, or it must cost such a sum each year as will produce \$1,000 by the time the man has reached his "expectancy of life." The man who dies early, leaves a large estate in proportion to the premiums paid. The man who lives long not only must pay for his own insurance, but he must help make up the deficiency that is created by those who die soon.

If every man knew he was going to live, savings banks would be better than life insurance. But life is an uncertain thing. It is the "unexpected that happens," hence the value of life insurance. The fraternal order offers cheap temporary protection—but it is temporary. Everyone who has been in an order on the assessment plan for 10 or 15 years knows that rates gradually increase, and they increase often at the wrong end of life; when the earning capacity has been diminished. I know many of my early friends have been "kicked out" because they could not pay the ever-increasing calls for "more money." There are about 60 old line companies. The law of supply and demand governs here as everywhere. Competition is very sharp. If life insurance could be furnished at half present rates, as Mr. L. thinks, some companies would "cut the rates."

Again, at 50 or 60 years of age many men need money more than they need life insurance. A policy in a regular company will contain a cash surrender value that can be taken, and in many cases it represents a most valuable asset. Between the man and want. In the earlier years his estate was protected. A man would better have less insurance, and have it of the right kind, than to have a safe full of "certificates." A farmer ought to have just as good insurance as a merchant or banker, and he will when he comes to understand the case. R. M. CROBIE, Orchard Farm, Henry Co., Iowa.

NEW WAY CATCHING RABBITS.

A new way, a cruel way, of catching rabbits has been discovered. Mr. D. Shute and E. Palmer, fishermen, of Eastport, Maine, one night, a couple of weeks ago, concluded to try their trawl hooks on rabbits, and see if they could not catch them as well as fish. They baited their trawl hooks with cabbage leaves and tied 100 of them so baited in the woods as an experiment to see how they would work on rabbits. The next morning bright and early they were up to see how the thing had worked. To their astonishment, they found they had caught 84 rabbits with the 100 hooks. The majority of them were alive and were shipped to patrons for their table value, which is enhanced by their having no gunshot wounds. The next night from the same hooks about half the number was caught. In the second lot were several rats, squirrels, a raccoon and a weasel. The Maine rabbit is a hare, larger than our cotton-tail, and turns snow white in winter. While this method is cruel, yet where rabbits are destructive to fruit trees, gardens, etc., it may have to be resorted to to save them. If any of the RURAL WORLD readers try this method of catching rabbits please report results. We would make, however, that pieces of apple would make better bait than cabbage.

OSAGE ORANGE POSTS.

Editor RURAL WORLD: In answer to W. H. Parke, Franklin County, Mo., we will say Osage orange fence posts are among the most durable that we have. We have used them almost exclusively in our vineyards for the past 20 years. They have outlasted white cedar posts of twice the diameter. Osage posts of from three to four inches in diameter at the large end, put in the ground in our vineyards 25 years ago, are still nearly all good, and bid fair to last many years yet. They are best cut early in the fall—middle of November to Christmas. I want no posts cut after the first of January. Hancock Co., Ill. E. J. BAXTER.

PEARSON'S MAGAZINE for March tells of the good roads train, the school on wheels now rolling through the South, giving the dwellers in remote sections valuable object lessons on the need, the making, and the keeping up of good county roads. American tea, of which one hears frequently now-a-days, is described fully in the article of that name, from the very earliest experiments in its manufacture down to the latest phases of its progress.

The Dairy

WHAT THE DAIRYMAN MUST DO.

The article on this page headed "Little Money in Dairying" makes evident the fact that even in the great butter-producing state of Iowa dairymen are not getting rich very fast. An investigation showed that on an average the patrons of 100 creameries received in 1899 \$1.76 per cow per year for the labor involved in caring for the cows and interest on the investment. A herd of 20 cows at that rate would return to its owner in one year \$35.20 to pay him for his labor and interest on his investment. Whether this be due to lack of intelligence, as Gov. Hoard asserts, or not, it will be interesting to contrast the figures with some drawn from the oleomargarine and the cottonseed oil business, the two lines which, it is declared, will be destroyed by the proposed ten-cent-per-pound oleo tax.

The ingredients of oleomargarine, the tubs and the present tax of two cents per pound make the goods cost the manufacturer about 10 cents per pound exclusive of the labor and interest on the investment. The manufacturers sell to dealers for about 15 cents per pound. This gives them five cents per pound to cover cost of labor and interest on investment, a margin sufficiently large to yield vast profits. Cottonseed oil sells in the neighborhood of \$3 per ton for cottonseed, and from a ton of seed get products that bring them upwards of \$30, leaving \$24 per ton to cover cost of manufacture and interest on the investment. The cottonseed oil business especially would seem from this to be little danger of extinction by the operation of the ten-cent-tax law.

But what are the buttermakers to learn from the figures presented? One thing, at least, that the enactment of the law taxing oleo colored in semblance of butter ten cents per pound will not of itself make butter-making profitable. On the basis of the yields per cow reported by Gov. Hoard, the oleo maker can drive the butter-maker out of business even when a ten cent per pound tax is put on the goods of the former. The dairyman must learn how to apply business principles to his business.

FIFTY DAIRY RULES.

The Dairy Division of the Bureau of Animal Industry, U. S. Department of Agriculture, has had printed on cloth the 50 dairy rules that appeared in Farmers' Bulletin No. 53 on Care of Milk on the Farm. The sheet can be tacked up on the wall of the cow stable where it will be under the eye of the dairyman and his assistants, and, so placed, should be a means of improving conditions and methods on the dairy farm.

These rules, printed in this form, are for distribution among dairymen, and we suggest that our readers send to Major Henry E. Alvord, Chief of the Dairy Division, Washington, D. C., for a set.

And when the sheet has been received, the rules read once and tacked up, don't forget them and continue old methods and practices that are contrary to the rules. It would be a good idea, we think, if the head of the establishment would hold out some inducement to his boys and girls and the hired helpers as well to study the rules and commit them to memory—say by offering a prize to the one who would first commit them to memory. This idea could be carried still further with profit by giving a prize to the one who did his part of the dairy work most nearly in accordance with the rules.

There are six sets of rules; first three general rules for the guidance of the owner and his helpers, then those that pertain to the care of the stable, the cows, how the milking should be done, care of the milk, and care of the utensils. Pretty nearly the whole gospel of dairymen is condensed into these 50 rules, and every one of them should be indelibly fixed in every dairymen's mind. They were prepared by Dr. A. Pearson, Assistant Chief of the Dairy Division.

Let us make another suggestion in this connection: Alongside of the 50 rules there should be placed a large cardboard, or sheet of paper, ruled across and up and down, on which to record the weight of milk given morning and night by each cow, and for a month. Then with a 25-cent spring balance, a lead pencil, and a wonderful farm tool spoken of in last week's RURAL WORLD and the set of rules, one is in position to find out if he is making or losing money in the dairy business; if losing, why and where and what to do to check the loss. An article in last week's RURAL WORLD on Cheapering the Cost of Milk tells what the result of this will be.

CHARACTER OF SILAGE DAIRY PRODUCTS.

Professor Henry of the Wisconsin Experiment Station writes to Hoard's Dairyman of the increased use of silage for making milk. He says: The prejudice against the silage-made milk has not yet entirely died out, though it is rapidly passing. The edict which went forth from one of the milk condensaries about a score of years ago, that no milk from silage-fed cows would be received under any circumstances, was taken up by other condensaries as they sprang into existence. Doubtless the proprietors regarded this as the easiest way of settling what might otherwise make trouble. This unreasonable ruling has done much to prejudice our people against silage for the dairymen. An interesting incident—almost an accident, we might say, occurred some time since, which has proved conclusively the injustice and folly of such a sweeping condemnation of an excellent feeding stuff.

Dyspepsia

What's the use of a good cook if there's a bad stomach—a stomach that weak properly to digest what is taken into it?

The owner of such a stomach experiences distress after eating, nausea between meals, and is troubled with belching and fits of nervous headache—he's dyspeptic and miserable.

"I have been troubled with dyspepsia and have suffered almost everything. I have tried many different remedies, but could get no relief until I began taking Hood's Sarsaparilla. After the use of this medicine I could eat without distress, and today I am as well as ever, but I always keep Hood's Sarsaparilla on hand." Mrs. J. A. CROWELL, Canajoharie, N. Y.

Hood's Sarsaparilla and Pills

cure dyspepsia, strengthen and tone all the digestive organs, and build up the whole system.



In Olden Days
men were broken on the wheel,
now they buy
Electric Steel Wheels,
and save money. They fit any
wagon. Made with either stage
or street tread. Catalog tells. Let us
tell you how to make a low down
wheel with any size wheel. Had
width tire. Catalog tells. 10¢ free.
Electric Wheel Co., Box 74, Quincy, Ill.

cellent feeding stuff. A condensing company in Michigan owns factories in Lansing and Howell. The Lansing factory, first built, was not receiving sufficient milk from the farmers for full operation and was therefore eager to secure a larger supply. The milk from a certain farm was found to be large in amount and satisfactory in its quality. This farmer's milk had been repeatedly praised by those whose duty it was to watch quantity and quality. Nothing had ever been said about silage-produced milk, for the subject had never been considered. The officers thought, in that community, to the surprise and doubtless the consternation of the officials it was one day learned that the milk from the farmer who had been so much praised for abundance and quality was from silage-fed cows. Here was a crisis! Should the farmer be turned down? If his milk was accepted, what should be said of the other farmers adopting his practice of feeding silage? Choochoo the assembly course, the factory accepted the situation, and the outcome was a pamphlet of nearly a hundred pages, treating on the construction of silos, the growing of silage crops, filling the silo and feeding the silage. These pamphlets were placed in the hands of almost every patron of this condensing company. A letter received from an authoritative source a couple of years since stated that about one-third of the milk received at the Lansing condensary was then being produced by silage-fed cows. During a visit to the East some time since the writer found silage used as the main roughage on many of the best dairy farms. Milk that brought from \$12 cents a quart under special brands in New York, Boston and other cities, was from silage sources. On many eastern dairy farms the business would have to be abandoned were it not for the silo. Where Timothy hay sells from \$15 to \$20 per ton, what could the milk producers do without the silage?

LITTLE MONEY IN DAIRYING.

The earnings of dairy cows in Iowa leave their owners but \$1.76 per cow per year for the labor involved in caring for them and interest on the investment. At least that is what 1900 heads paid from figures were obtained by ex-Governor Hoard of Wisconsin, for a paper he read at the recent meeting of the Iowa Dairy State Association.

At his own expense he hired an Iowa man of ability and unquestioned integrity to visit 100 creamery patrons in Iowa to obtain a solid basis of facts regarding the following points:

"1. The actual earnings at the creamery of each herd, per cow.

"2. The actual cost of feed per cow, at the local market rates, pasturage reckoned at \$5.00.

"3. The return in cash per cow for every dollar expended in feed."

With the data received from the above inquiries as a foundation for his paper he entered upon the subject with the following statement:

"Iowa is a great dairy state. It has about 1,000 creameries, and 100,000 farmers who keep cows with more or less profit or loss, and who patronize these creameries. Nearly 100,000,000 pounds of fine butter are made annually and bears a first-class reputation. Iowa has a dairy school supplied with some of the ablest teachers in the land. Her creameries are equipped with the most improved machinery. Everywhere, except at the farm end of the business, there is progress and a liberal use of modern knowledge.

"I here venture the assertion, however, and it is founded on evidence which I will submit later on, that the average patron of the creamery in Iowa is but little if any better educated as a dairyman than he was twenty years ago, and that he is producing milk to-day from as poor cows, and just as expensively as 25 years ago. It is astounding that the influences of progress and intelligence should affect all other branches of this great industry to their manifest improvement, and still the farmer remains, with but few exceptions, right where he was so long ago."

Then came his statement regarding the results of his inquiries which revealed these facts:

The average number of cows to each herd was 9.82.

The average cost of keeping was \$28.08 per cow.

The price of butter was reckoned at 13 cents a pound net to the patron, which is certainly high enough for the year 1899.

The average number of pounds of milk per cow was 3078.65.

The average number of pounds butter yield per cow as returned by the creameries, was 146.22, or a fraction over 24 pounds of milk to one of butter.

The average earnings of these 982 cows for the year in butter, was \$77.78. This leaves \$1.76 only to pay for labor and interest on the investment.

The cost of keeping was reckoned at what the forage and grain was worth in the local markets.

In conclusion, the governor said: "There is one phase of this matter which I believe affects very materially the future stability of the creamery interest in this and every other state. How long will Iowa farmers continue to patronize creameries, if they are to realize only \$1.76 net profit per cow?"

"This state of affairs is all due to wrong ideas of the business. There is no need of it. The average butter production per cow of the 40,000 cows of Jefferson county, Wisconsin, is 244 pounds. At nineteen cents a pound, this amounts to a butter revenue alone of \$46.36 per cow. And this is a territory only 24 miles square. But the cows are different there. The ideas about cows, what constitutes a dairy cow, are different among the farmers to start with. There is where progress and profit start. The average cost of keeping these Jefferson county cows was \$29.50, only \$7.76 more than the Iowa cow costs, but the product is nearly 100 pounds of butter more.

"Can the Iowa creamery patron afford to hold to his present notions of dairying with cows that are neither bred, fed, nor handled in a way to give him a living profit? The responsibility rests with him. It does not rest on the creamery, except that it should do everything in its power to dispel these unprofitable ideas by using its organization to promote a progressive dairy education among milk producers. Make them more intelligent in this regard and you will at once see a great uplift in the dairy production and revenue of one of the grandest states in the Union."

As Governor Hoard says, the same condition of things prevails among the majority of farmers in other states besides Iowa and it is high time business principles be applied to dairying that the dairy man may have more than a paltry dollar or two as a return for the care bestowed upon a cow for a whole year, to say nothing of including interest on the investment in the dollar.—National Rural.

HOW I FEED MY DAIRY COWS.

Paper read before the 12th annual meeting of the Missouri Dairy Association by J. L. Erwin, Steedman, Mo., to whom was awarded the first premium for papers on the subject named.

Dollars and cents to the credit side of the balance sheet is the ultimate object of every dairyman. Large yields per cow at large expense and risk, may mean, after all, little profit in the business. My pasture of bluegrass, timothy, red and white clover, orchard grass and red top supply the feed in general from May till November.

It may interest this audience to know how I have managed my cows during the past year. A year ago we had a fine crop of pumpkins, which we sliced with a corn knife and fed to the cows, adding also a few nubbins of corn twice a day to the grass ration. I have ground no corn for the past eight years because corn was too cheap to grind. When corn was worth 25 cents per bushel, it cost one-cent to grind; and when it was 15 cents to the ration, I saved by the pigs and the chickens. I fed my best cows a peck of nubbins corn, chopped fine with the shuck on, at a meal, with all the corn fodder (and at times a small ration of clover and timothy hay) they would eat, and I saved my corn. Last year my cows did well on it.

About April 30 I turned on grass, and by the first of May had ceased to feed corn. July 25, 1901, found the pastures so dried that I began hauling green corn from the field and running it through a feed cutter and supplementing this with about two pounds of bran and two pounds of ground wheat per day. This I kept up till October 13, when I began grazing on wheat, which I sowed, commencing on September 7, since which time I have fed nothing. Whilst others were sowing corn, peas, sorghum, Kaffir corn, Hungarian millet, etc., I sowed only my wheat ground. I plowed shallow and rolled and harrowed and rolled till when the drill started it was one great field of dust, which made such a cloud of dust you could hardly see the team. My neighbors were all against me: "Will lose your seed. It will wash away in the rain. 'Why didn't the wheat sprout and die that shattered off last June,'" said I. Wheat is a plant that grows in cool weather. 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PATENT GROOVED
Tire Wheels
For Farm Wagons
Any size to fit any shaft.
MADE ONLY BY
HAYMA METAL WHEEL CO.
HAYMA, ILL.
We are the largest manufac-
turers of steel wheels and tire
trucks in the U. S.
Get Write for Price.

Live Stock

DATE CLAIMS FOR LIVE STOCK SALES.

March 11.—W. P. Nichols, West Liberty, Iowa, Sherborns.
April 1, 1902.—M. Sooter, Lockwood, Mo., Sherborns.
June 18.—C. E. McLean, Danville, Ind., at Indianapolis, Double Standard Polled Durhams.
The "National Hereford Exchange" under management of T. F. B. Sotham, as follows:
March 25-27, 1902.—Chicago.
April 25-26, 1902.—Kansas City.
May 27-28, 1902.—Omaha.
June 24-26, 1902.—Chicago.
ABERDEEN ANGUS CATTLE.
April 10-11.—Combination sale, W. C. McGavock, mgr., Kansas City.
June 10-11.—Combination sale, W. C. McGavock, mgr., Chicago.
NATIONAL SHORTHORN SHOWS AND SALES.

March 11 and 12.—At Trenton, Mo., combination sale, H. J. Hughes, secretary, March 12.—At Kansas City, W. R. Nelson, dispersion sale.
March 20.—At Kansas City, B. B. and H. T. Groom, Pan-Handle, Texas.
March 25.—At Vandalia, Mo., Robinson Bros. & Wright.
May 9.—At Columbia, Mo., Boone County Sherborns Breeder's Association.
May 14.—At Kansas City, Mo., W. T. and H. R. Clay, Plattsburg, Mo.
Oct. 25, 1902.—Geo. W. Jessup, Rockville, Ind.; Charles F. Mills, Clerk, Springfield, Ill.
Dec. 3, 1902.—Combination sale, Berkshires, Manager A. J. Lovejoy, Hooce, Ill.; Clerk, Charles F. Mills, Springfield, Ill.

ABERDEEN-ANGUS CATTLE.

Editor RURAL WORLD: The Aberdeen-Angus cattle are a native Scotch breed, indigenous to the northeastern districts of Scotland. This breed is characterized, and there it has been developed into one of the most handsome and valuable of living varieties of cattle. From negative evidence it may be concluded that the loss of horns occurred more than 100 years ago. The attention of enterprising agriculturists appears to have been first directed to them 30 years ago.

THE PROMINENT QUALITIES which attracted the attention of breeders were the peculiar quietness and docility of the "doddies," the easiness with which they were managed, the few losses incurred from their injuring one another, because of the absence of horns, and the power of disposing of a greater number of them in the same space, their natural fitness for stall feeding and the rapidity with which they were fattened.

THE PRODUCTION OF BEEF, the true function of the ox, came to be recognized and he was withdrawn from the plow and put in the feeding stall. Bone and muscle were made subordinate to the possession of a high quality of beef. A new ideal was formed, representing a maximum of beef and a minimum of bone, prime in quality and with little offal.

AN ORDINARY GRAYER of color, coarse hair, high on back and slim at both ends, can and will eat as much good hay and grain as one that is straight and bred right. The poor one may, by good luck, make half or two-thirds the growth of the well-bred one, but his growth, nine times out of ten, will be in the wrong direction. He has a tendency to make growth in the legs or by increasing his girth, without filling out the ends. When he comes to market, a candidate for the butcher's block, he will then disappoint his owner more than he ever has during the nine months of his life. He has been eating plenty of feed without getting into a shape that was pleasing to the eye of the feeder. He will sell at 75c or \$1 per 100 pounds less than the good grade steer that is straight on the back and has put his weight and growth in the right places.

THE BUTCHER is looking for the color, look that will show the greatest percentage of good meat, and he knows one when he sees him. He has the finished animal there before him. The farmer who values his time too highly to spend it on cheap cattle, will get pleasure and profit from investing at reasonable prices in good Angus bulls, giving them good feed and good heed. He will prosper because he has the best, which is always in demand. Melville, Ill. J. P. VISSERING.

GRADES OR PURE BREDS.

Editor RURAL WORLD: I am very much interested in high grade and pure bred cattle. Some say sell the grades and buy pure breds, but can a man in debt afford to sell five good grade cows that raise calves that can be sold for \$25 per head when one year old, and put that money in one year's time? If he should die or lose a calf would he be left a slim start. Would you like to hear from C. D. Lyon and other stockmen on the subject. I think any farmer stands in his own light to breed his cows (scrubs or grades) to any but a pure-bred sire.

I heard C. D. Lyon speak at Monroe City during the Farmer's Institute last fall, and all I have to regret is that I did not make myself known as a RURAL WORLD reader and give him a Methodist handshake. W. W. WRIGHT, Monroe Co., Mo.

HOOD FARM Garget Cure

In garget the udder comes inflamed, hot, red and painful, and the milk seems thick, stringy, bloody or watery. A tablespoonful of Hood Farm Garget Cure mixed with damp feed two or three times a day will cure any ordinary case. "One of my cows had bloody garget and I fed her Hood Farm Garget Cure, night and morning for six days, after which the milk was all right." A. E. Loomis, North Wilcox, Vt.
Prices, \$1 and \$2.50. Sent by any railroad express point in the United States, \$1.25 and \$2.75. Large holds four dollars size.

Hood Farm Salve—especially prepared to be used in connection with our Garget Cure. Also excellent for cracked teats, sores, bruises, etc. Sent by express on garget and its causes. Mailed in plain paper. C. I. HOOD CO., Lowell, Mass.

MEMBERS OF THE A. A. BERRY SEED COMPANY, CLARINDA, IA.

There is no business so fascinating as the growing and selling of seeds. The bright children shown in the illustration on this page are familiarizing themselves with the products of the A. A. Berry Seed Co.'s farm at Clarinda, Iowa, and are enjoying themselves at the same time growing up healthy and hearty. They take great pride in the immense ears of corn of the Imperial, Legal Tender, Snow Flake and Golden Cap varieties that are raised by this firm, who have scored a great success in grading and advancing the quality of corn especially. They have also made a great record on wheat, oats, barley, speltz, bromus grass, potatoes and vegetable seeds. They are issuing their sixth catalog. Since catalog No. 1 was issued their business has made wonderful strides. Starting with a small mail-order business on a farm several miles in the country, they have built up a large wholesale business, furnishing hundreds

FIVE GRADES OR ONE PURE BRED.

Our Monroe County, Mo., correspondent, Mr. Wright, raises a question of great moment to our readers, most of whom are cattle raisers to a greater or less extent. Is it best for a young man, or one who is in debt, to sell grade cows and put the proceeds into a smaller number of pure breds? Mr. Wright assumes that it will take five grade cows to buy one pure bred, and he figures the gross annual returns of the five cows as being \$125. Assuming that the calves of the pure-bred cows would average \$125 per head at one year of age, it is evident that the pure-bred cows would be much more profitable than the grades, because of the smaller expense in maintaining one rather than five. In fact, when one counts the cost of keeping a cow a year, and also that of a calf from the time it is weaned until a year old, we do not see how there can be anything left for profit out of the \$5 per head which Mr. Wright assumes will be received for the calves from the grade cows. But there is, or should be, two other sources of income to be counted—namely, the manure and the milk. As is well known, a goodly portion of the food eaten by the animal is voided as waste. This has a distinct money value as a fertilizer, great enough, under many circumstances, to nearly or quite equal the cost of the animal. And the milk, if the correspondent to the calf of his grade cow. The other source of income referred to is the milk.

Even if one is keeping grade cows of a beef breed for the purpose of raising calves to sell to feeders, it is by no means necessary to ignore the milk as an additional source of profit. With skill in selecting and proper feeding and care it need not be difficult to make such cows give 4,000 pounds of milk a year, the cream of which will be worth full \$30. Suppose, however, one is prejudiced against skim milk calves, he can so manage that the calves need not consume more than one-half of the \$30 worth of butter fat, and so add at least \$15 per cow per year to the income; and if he will get over his squeamishness about skim milk calves, get a farm separator and put his calves on to warm sweet skim milk, by the time they are a month old, pay some attention to selecting cows of a good milking type, he can make the income from the butter fat run anywhere from \$10 to \$40 per cow, or even double the returns from the calves alone. Then if there be added to this a reasonable value for the manure, we think it will be easy to arrive at the conclusion that five grade cows will be better for a farmer of limited means than will one pure-bred cow, kept simply for its calf. Of course much will depend on proximity to creamery, facilities for making butter, quality of land as to whether it needs fertilizing or not, and other points.

The subject is one that can be very profitably discussed by our readers, and doubtless there will be differences of opinion. In expressing these, oneself and others will be benefited.

HOW TO IMPROVE LIVE STOCK.

Editor RURAL WORLD: In a recent issue "Maplehurst" spoke of murrain as a remedy for scrub cattle. I have known of instances where men would rather pray for relief from the murrain scourge. It seems to me he might have been just a little hot under the collar when he suggested that as a means to clear our state of scrub cattle. I know he will cheerfully consent to a more appropriate way to reach the desired end. One of our great men at Washington recently said: "We will not pass by the demands of the farmers unheeded." If Congress can be reached and roused into action in sympathy with the farmers, why not our state legislatures? They can be. What farmers need to do is to put their heads together at Farmers' Institutes, memorialize the members of our legislature, request the passage of a law imposing a fine on any man who shall permit any male animal—unless it be a tom cat or a pet rooster—to run at large. Then see to it that the law is rigidly enforced, and

of dealers and thousands of farmers the highest grade of seed at reasonable prices. The manager, Mr. A. A. Berry, lives on a farm near town, where he is convenient to his business and is in a position to know just what the farmer needs and what is best adapted to the wants of various locations. Clarinda is located in a section of country that grows almost perfect seed development. If you buy from this company you can be assured of best seeds for the least money and know absolutely that you are dealing with a reliable and trustworthy firm. Mr. Berry is none the less a shrewd, up-to-date business man, because he is a farmer. For that matter, the successful farmer of to-day must be a mighty shrewd business man. The A. A. Berry Seed Co. sell timothy, clover and other products to farmers at wholesale prices, storing up thousands of bushels of seed every fall. Write for their catalog, which is sent free, and please mention this paper when you do. Address A. A. Berry Seed Co., Clarinda, Iowa.

ILLINOIS LIVE STOCK REPORT.

Commission Recommends Restrictions in Importation of Horses.
Springfield, Ill., Feb. 28.—The Board of Live Stock Commissioners held their regular monthly meeting to-day. Among the important matters considered was the submission of the annual report for the fiscal year.

At the three principal stock yards in the State—Chicago, East St. Louis and Peoria—there have been 15,187 diseased cattle inspected and tagged; 5,881 slaughtered and port-mortemmed, and 573 condemned and tanked for fertilizer. This work has grown from 4,000 eight years ago, and \$500 four years ago, to its present proportions, and is still on the increase. The system now in vogue effects a saving to stockraisers from this class of stock of over half million dollars per annum.

There has been a 100 per cent increase in the number of horses afflicted with glanders and slaughtered during the year, and a 200 per cent increase in the amount of compensation allowed. This increase in compensation is attributed to two causes—one, the increase in the value of horses generally; the other, that the disease has appeared in localities where attention has been given to the breeding of a better class of horses than had been done in localities hitherto affected.

The board has attempted the past year to trace the source of contagion in each outbreak of this disease, and is forced to the conclusion that the importation of Western range horses, and sales, are responsible. In a majority of the cases investigated the first appearance of the disease was in some branded Western or range horse. The board thinks some restriction should be put upon the indiscriminate importation of such horses. Of the disease prevalent during the year may be mentioned an outbreak of anthrax in the northern end of Cook, and the southern end of Lake counties. But one outbreak of Texas or splenic fever occurred in the State during the year.

STOCK NOTES.

J. P. VISSERING, the Aberdeen-Angus cattle breeder of Melville, Ill., in a recent letter to this office, says: "I will here remark that the RURAL WORLD easily ranks with the best as an advertising medium, considering results, such as number of inquiries and sales, compared with best of advertising."

COL. W. D. ROSS, of Ottumwa, Mo., places his auctioneer's card in this issue of the RURAL WORLD. He has been breeding improved stock all his life and is a well-posted man on what constitutes a good animal. He is also a good auctioneer and can make a practical dealer that would be a credit to any man. If you want an auctioneer that is worth his fee give Col. Ross a trial.

EVERY READER of this paper who is ill or in poor health, or has some friend or relative who is sick, should be interested in the offer on another page headed "Personal to Subscribers," made by the Theo. Noel Co., of Chicago. This company is the proprietor of the famous Vitas-Ox, a natural mineral remedy discovered by Theo. Noel, a geologist, many years ago, which they offer to send out on trial to every ailing person. Many of our readers may have already used this medicine and know of its merits, but those who have not should not fail to avail themselves of this most liberal offer. The company is reliable and will do just as they promise.

LAST WEEK'S HEREFORD SALE AT KANSAS CITY.

What started slowly and at unsatisfactory prices proved to be a very creditable Hereford sale. At the opening session of the three-day event Tuesday afternoon, bidding was slow and prices disappointing. Wednesday morning, however, the arrival of new buyers seemed to stimulate those already present and much life was put into the auction. The sessions on Wednesday and Thursday were very gratifying despite the thin condition of a considerable number of the offerings. During the three days 126 head were sold at an aggregate of \$28,350, making a general average of \$225.64. Cows were in greater demand than bulls and brought \$108.24 per head more money. The average on 29 bulls was only \$208.45, while 97 females averaged \$216.70. It should be stated, however, that outside of one or two bulls, there were none in the sale that were of the same quality as a large number of females. A perusal of figures showing the destination of the cattle sold in the sale gives Missouri and Kansas over half the offerings. Forty-seven cows and 13 bulls, a total of 60 head, went to the former state, and 11 bulls and 13 cows, making a total of 24 head, were taken by Kansas breeders. Eliminating Kansas, Missouri got more cattle than all the other states combined.

The destination of the Herefords is as follows:

	Bulls.	Cows.	Total.
Kansas	14	15	29
Missouri	19	47	66
Nebraska	2	—	2
Indiana	—	17	17
Illinois	2	13	15
Alabama	3	—	3
Iowa	3	2	5
Michigan	—	2	2
New Mexico	—	4	4
Arkansas	—	1	1
Oklahoma	1	—	1
Total	29	97	126

The individual averages of the breeders contributing to the sale are as follows: Gudge & Simpson, Independence, Mo., 6 bulls, \$174.00; Average, \$290.33; 30 females, \$11,285.00; Average, \$376.10; 36 head, \$12,000.00; General average, \$261.94.

Scott & March, Belton, Mo.—8 bulls, \$1,200.00; Average, \$150.00; 24 females, \$1,185.00; Average, \$49.37; 32 head, \$2,385.00; General average, \$230.50.

O. Harris, Harris, Mo.—8 bulls, \$740.00; Average, \$92.50; 13 females, \$748.00; Average, \$57.15; 16 head, \$4,488.00; General average, \$280.50.

Frank Rockefeller, Belvidere, Kan.—8 bulls, \$740.00; Average, \$92.50; 6 females, \$715.00; Average, \$119.16; 14 head, \$2,055.00; General average, \$148.50.

Walter B. Waddell, Lexington, Mo.—3 bulls, \$300.00; Average, \$100.00; 12 females, \$740.00; Average, \$61.66; 15 head, \$4,380.00; General average, \$291.00.

C. A. Stannard, Emporia, Kan.—6 bulls, \$1,200.00; Average, \$200.00; 7 females, \$785.00; Average, \$112.14; 12 head, \$2,115.00; General average, \$247.50.

Steward & Hutcheon, Greenwood, Mo.—1 bull, \$125.00; 5 females, \$1,945.00; Average, \$389.00; 6 head, \$1,990.00; General average, \$331.66.

Mrs. C. S. Cross, Emporia, Kan.—2 bulls, \$1,000.00; General average, \$500.00; 3 bulls, \$275.00; General average, \$183.33.

Fritz & Shea, Blakesburg, Ia.—2 bulls, \$375.00; General average, \$187.50.

SUMMARY.
29 bulls brought, \$4,120.00; Average, \$142.06; 97 females brought, \$26,230.00; Average, \$270.51; 126 head brought, \$30,350.00; General average, \$240.87.

INSPECTION OF FEEDING STUFFS.

The great variety of feeding stuffs placed upon the market in recent years has made it necessary to provide some form of supervision that will enable the purchaser to know the composition of the article for which he pays his hard-earned dollar, and hence there has been enacted in nearly all the states laws known as feeding stuffs inspection laws, says the "Mirror and Farmer." The laws are very similar in all the states, simply requiring the manufacturer or dealer to mark upon each package offered for sale the composition of the goods contained, and also receive a license from the state, and pay a fee, which is supposed to cover the cost of supervision, inspection and analysis. The New Hampshire legislature enacted such a law last winter and it took effect on the first day of December. The other New England states had previously enacted similar laws.

HANDSOME WATCH FREE



A Solid Gold Ladies' or Gents' watch costs from \$25 to \$50. Don't throw your money away. If you want a watch that will equal for time any **Solid Gold Watch** made, send us your name & address at once & agree to sell only 6 boxes of our famous Vegetable Pills at 25 cts. a box. It's the greatest remedy on earth for Constipation, Indigestion & all stomach disorders & they sell like hot cakes. Don't miss the chance of your life. Send us your order & we will send the 6 boxes by mail. When sold you send us the money & we will send you the **WATCH** with

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the same day money is received. There is no humbuggery about this. We are giving away these watches to quickly introduce our Remedy—and all we ask is that when you receive the watch you will show it to your friends. Hundreds have received watches from us & are more than delighted with them. This is a glorious opportunity to get a fine watch without paying a cent for it & you should write at once. Address

AMERICAN MEDICINE CO., Dept. 466, 47 Warren St., New York City.

ure, but really of only one-half the value. These laws do not affect the sale or provide for any supervision over the sale of grains sold either whole or ground when the quality is good, without the admixture of other grains or the withdrawal of any element for some other purpose. The sale of corn, wheat, oats, barley or rye, either whole or ground, does not come under these laws, although there is a great difference in the feeding value of different grades of the same kind of grain, but when the manufacturer places upon the market some form of feeding stuff of unknown composition, and susceptible of the widest variation in feeding value not in the least degree indicated by its appearance, it is only right that he should be required to place the guaranteed composition upon the package. The purchaser can then determine its feeding value and know what he is paying per hundred pounds for protein contained.

This principle has been successfully applied to the sale of commercial fertilizers with perfect success, and a licensed brand of fertilizers can now be purchased with as much confidence in its composition as in the purchase of flour or sugar.

The enforcement of feeding stuffs laws will accomplish the same in the purchase of commercial feeding stuffs. It is probable that some time in the future other articles will be sold under a similar requirement. In the article of milk there is wide variation, as our creameries have found, and milk delivered to these is paid for according to its quality, but the milk retailed in our cities and villages is sold for a price not dependent upon its quality. To be sure it must reach a certain standard fixed by law, but the person who exceeds this requirement gets no more for his milk than the person whose milk barely clears the law. Probably no further legislation is needed, but the time will come when people will buy their milk at a price based upon quality and the milkman who furnishes 5 per cent milk will get a better price than he who furnishes 5 per cent milk.

ST. LOUIS NATIONAL STOCK YARDS.

Market Report Furnished by Evans-Bird-Buel Company.

CATTLE.—Receipts this week only moderate in native division. There were several loads of good cattle here, with top of \$2.75 for 17 head of 1,500-lb. steers and several bunches good enough to sell from \$2.00 to \$2.25. Prices steady to 10c lower for part of week, but under light receipts Wednesday and Thursday, the market gained the loss, and closes steady to strong on all fat beef cattle as compared with a week ago. Receipts of calves and heifer butcher stuff moderate, and demand good for best; medium grades declined 15 to 25c and common canner grades 5c to 75c from the highest time last week. Receipts at Chicago a little heavier than last week. Receipts of stockers and feeders light, with strong demand for all good quality classes; best grades steady; common and inferior light grades lower. Best grades cows and calves strong, common and medium classes a shade lower. Veal calf market closes lower. While the top was 74c per lb. black sold from 6c to 9c.

Quotations based on present conditions of the market are as follows: Best native beef steers, strictly fancy cattle, 1,200 to 1,700 pounds average, \$7.00 to \$7.25. Choice export steers, 1,200 to 1,600 pounds average, \$5.75 to \$6.00. Good shipping and export steers, 1,200 to 1,600 pounds, \$5.00 to \$5.25. Fair to medium shipping steers, 1,200 to 1,400 pounds, \$4.00 to \$4.25. 1,200 to 1,250 pounds average, full range, rough to best, \$3.50 to \$3.75. Steers, 1,000 to 1,100 pounds average, full range, \$3.00 to \$3.25. Bulk of cattle sold at \$2.00 to \$2.25. The bulk of all the cows sold at \$2.25 to \$2.50. Canning cows sell at \$1.75 to \$2.00. Veal calves, full range, \$3.00 to \$3.25 per 100 pounds. Heifers and yearlings sold at \$1.50 to \$1.75. Choice native heifers sell at \$4.00 to \$4.25. Best native cows sell at \$4.00 to \$4.25, and good heifers sell at \$4.00 to \$4.25. Medium cows at \$3.00 to \$3.25. Fair cows at \$2.50 to \$2.75. Interior, light and old cows, \$1.00 to \$1.25. The bulk of the southwest cows sold at \$1.00 to \$1.25, and the bulk of all the cows sold at \$1.00 to \$1.25. Canning cows sell at \$1.75 to \$2.00. Veal calves, full range, \$3.00 to \$3.25 per 100 pounds. Heifers and yearlings sold at \$1.50 to \$1.75. Choice native heifers sell at \$4.00 to \$4.25. Best native cows sell at \$4.00 to \$4.25, and good heifers sell at \$4.00 to \$4.25. Medium cows at \$3.00 to \$3.25. Fair cows at \$2.50 to \$2.75. Interior, light and old cows, \$1.00 to \$1.25. The bulk of the southwest cows sold at \$1.00 to \$1.25, and the bulk of all the cows sold at \$1.00 to \$1.25. Canning cows sell at \$1.75 to \$2.00. Veal calves, full range, \$3.00 to \$3.25 per 100 pounds. Heifers and yearlings sold at \$1.50 to \$1.75. Choice native heifers sell at \$4.00 to \$4.25. Best native cows sell at \$4.00 to \$4.25, and good heifers sell at \$4.00 to \$4.25. Medium cows at \$3.00 to \$3.25. 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